

**Amendments to the Claims**

This listing of claims will replace all prior versions and listings of claims in the application:

- 1.(original): A method of processing an information signal, the method comprising:
  - applying a signal modification process to an information signal resulting in a processed signal, said signal modification process being controlled by at least one control parameter;
  - comparing the processed signal with the information signal to determine a measure of perceptual quality of the processed signal;
  - adjusting said at least one control parameter in response to the determined measure of perceptual quality.
- 2.(original): A method according to claim 1, further comprising
  - dividing the information signal into a sequence of segments of the information signal;
  - wherein the step of applying the signal modification process comprises applying the signal modification process to a first one of said segments of the information signal resulting in a first segment of the processed signal;
  - wherein the step of comparing the processed signal with the information signal comprises comparing said first segment of the processed signal with said first segment of the information signal; and
  - wherein the method further comprises applying at least a part of the signal modification process to a second one of said segments of the information signal resulting in a second segment of the processed signal, the at least part of the signal modification process being controlled by said adjusted at least one control parameter.
- 3.(original): A method according to claim 2, wherein the second segment of the information signal is a segment subsequent to the first segment of the information signal in the sequence of segments of the information signal.
- 4.(currently amended): A method according to claim 2, wherein the second segment of the information signal is ~~[[the]]~~ a delayed first segment of the information signal, the first segment of the information signal being delayed to compensate for a duration of the steps of

comparing the processed signal with the information signal and of adjusting the at least one control parameter.

5.(original): A method according to claim 1, further comprising  
delaying the information signal to compensate for a duration of the steps of  
comparing the processed signal with the information signal and of adjusting the at least one  
control parameter; and

applying at least a part of the signal modification process to the delayed  
information signal resulting in a modified processed signal, the at least part of the signal  
modification process being controlled by the adjusted at least one control parameter.

6.(previously presented): A method according to claim 1, wherein the signal modification  
process comprises

determining a watermark signal according to a watermark embedding model;  
embedding the determined watermark signal in the information signal.

7.(previously presented): A method according to claim 4, wherein the signal modification  
process comprises

determining a watermark signal according to a watermark embedding model;  
embedding the determined watermark signal in the information signal;  
wherein the step of embedding the determined watermark signal is controlled by  
the at least one control parameter; and wherein the step of applying at least a part of the signal  
modification process to the information signal comprises  
delaying the information signal resulting in a delayed signal; and  
embedding the determined watermark signal in the delayed signal, the embedding  
being controlled by the adjusted at least one control parameter.

8.(previously presented): A method according to claim 6, wherein the information signal is  
an audio signal and the watermark embedding model comprises a psycho-acoustic model of  
the human auditory system.

9.(previously presented): A method according to claim 1, wherein the information signal is  
an audio signal and the signal modification process comprises an audio coding process.

10.(previously presented): A method according to claim 4, wherein the information signal is an audio signal and the signal modification process comprises an audio coding process comprising

- determining a bit-allocation pattern for coding audio signal; and
- performing a quantization of the audio signal according to the determined bit-allocation resulting in a quantized signal;
- wherein the step of comparing the processed signal with the information signal comprises
  - reconstructing the audio signal from the quantized signal; and
  - comparing the reconstructed signal with the audio signal;
- wherein the step of adjusting said at least one control parameter comprises adjusting the bit-allocation;
- and wherein the step of applying at least a part of the signal modification process to the information signal comprises
  - delaying the audio signal resulting in a delayed signal; and
  - performing a quantization of the delayed signal according to the adjusted bit-allocation resulting in a processed quantized signal.

11.(original): An arrangement for processing an information signal, the arrangement comprising:

- signal processing means for applying a signal modification process to an information signal resulting in a processed signal, said signal modification process being controlled by at least one control parameter;
- means for comparing the processed signal with the information signal to determine a measure of perceptual quality of the processed signal; and
- means for adjusting said at least one control parameter in response to the determined measure of perceptual quality.

12.(original): A device comprising an arrangement according to claim 11.

13.(cancelled)

14.(new): A computer program product for processing an information signal, the computer program product embodied on a computer-readable medium, the computer program product comprising:

- computer program instructions for applying a signal modification process to an information signal resulting in a processed signal, said signal modification process being controlled by at least one control parameter;

- computer program instructions for comparing the processed signal with the information signal to determine a measure of perceptual quality of the processed signal;

- computer program instructions for adjusting said at least one control parameter in response to the determined measure of perceptual quality.